

area. The species is not common; the VCH list for Kent (1908) gives as localities only Cobham Park and Birch Wood, and none in East Kent. The nearest ones to London listed by Fowler in *Col. Brit. Isles* (1890) are in Surrey — Esher, Shirley etc.

A misconception seems to have grown up concerning the habitat of this *Malthinus*, possibly originating with Stephens whose *M. pinicola* (= *frontalis*) is recorded from 'pines and firs' (at Ripley, Surrey), whilst his *M. frontalis* and *immaculatus* (another synonym) are noted from simply 'trees' (1939, *Man. Brit. Col.*: 192). Despite the latter datum, both Fowler (1890) and Joy (1932) connect it exclusively with fir trees; but I have not seen this association given by Continental authors. Though the idea must, of course, have some basis in fact, my experience tends to suggest that any such association is scarcely more than casual. Thus, besides one from pine in the Suffolk Breck, I have swept *M. frontalis* singly once or twice under spruce in Windsor Forest, but, far more often, have beaten it off mature and mostly ancient oaks in the area, once in some small numbers, and found one walking on the trunk of a large oak. Mr. P. J. Hodge likewise finds it on or about old oaks in a Sussex locality, and does not connect it with conifers. I first took it singly off willow and alder along a N. Somerset stream far from any fir trees but close to a rotting alder. The implication seems to be that decaying wood in some form (in trunks, boughs, or twigs, or perhaps in rot-holes) is the basic requirement; and whether the tree happens to be coniferous or deciduous is likely to be a matter of chance, or to depend on the type dominant in a given locality. If there is a preference, however, it would appear often to be for oak. — A. A. ALLEN.

LARVAE OF SWALLOWTAIL, *PAPILIO MACHAON* L., FEEDING ON THE EPIDERMAL LAYER OF FENNEL STEMS. — In August 1984, at Réthymnon in Crete, I found four nearly fully-fed larvae of *Papilio machaon* feeding on the green, outer (epidermal) layer of the stems of fennel, *Foeniculum vulgare*. Judging from the way the fennel leaves had died back to the base of the plant, the larvae must have eaten nothing but stem epidermis, as no fresh leaves could have been available for at least several weeks. Three of the larvae were reared in captivity and produced butterflies about a week after pupating. I saw adult *P. machaon* throughout Crete, often in association with roadside clumps of fennel, but no further larvae were found, and nor could I detect the tell-tale pale patches where the epidermal layer had been chewed from stems — this looks a little like the "barking" of trees by rabbits or deer but, of course, on a small scale. — DENIS F. OWEN. 66 Scraftoft Lane, Leicester, LE5 1HU.

A FOURTH CAPTURE OF *ADERUS BREVICORNIS* PERRIS (COL.) AT WINDSOR. — Of this very scarce beetle, known as British on a mere handful of records from the counties of Sussex, Berks.,

Hants., and Devon, I had the good fortune to beat a specimen from a mature oak in Windsor Great Park on 4th July last. Accompanying it were *Scaptia fuscula* Müll. singly and its relatively common congener *A. oculus* Panz. more freely. It is the second example of *A. brevicornis* taken by me in the locality (and the third that I have seen there) — making, with singletons by two other collectors, the fifth hitherto known form the Windsor area (see Allen, 1959, *Ent. mon. Mag.* 95: 120). As my previous specimen was taken on 11th September, the two captures between them probably span almost the whole activity-period of the species, which is a long one for such a rare insect. — A. A. ALLEN.

THE WHITE ADMIRAL: *LADOGA CAMILLA* L. IN WEST KENT IN 1984. — Two observations on the terrace of my flat at Shoreham during 1984 may possibly be of interest. On 14th August a very worn and elderly male *Ladoga camilla* alighted and after being photographed, died. Whilst this species is not, I believe, unknown in this area, it does not normally visit gardens. To-day, 29th September, an apparently fresh female *Colias crocea* Geoff. settled on my verandah roof long enough for positive identification before flying off. This species was common enough last year, but this was my only sighting in 1984. — H. J. WILDBORE, 2 Shoreham House, Shoreham, Sevenoaks, Kent TN14 7RY.

COMMUNAL CONJUGATION IN *TIPULA PALUDOSA* MG. (DIPTERA: TIPULIDAE). — During the night of 8th-9th September 1984, whilst running a 125watt lamp on a sheet at Great Bookham Common, Surrey, several *Tipula paludosa* very rapidly assembled, including several pairs *in copula*. To the amusement of the assembled company, three examples of this crane-fly were observed coupled, (tripled?), on the sheet, two males and a single female. One of the males had successfully paired with the female, and these two insects were aligned tail to tail at an angle of 180 degrees to each other. The second male was observed several times attempting to pair with the already attached female, by aligning itself parallel to her curling his abdomen around in frenzied efforts to make contact. After a few minutes he was apparently successful in this venture, having clasped the female's genitalia in such a manner that it was quite impossible to see which male was in fact carrying out the vital act. After some ten minutes I boxed the threesome, and they remained coupled in the pill-box until the following morning. Out of interest I picked up the bundle of insects holding the wings of each individual in turn. It was soon apparent in this manner that the coupling was firm, and not even a moderately sharp shake or two could separate any of the males from the female. Examination with a hand lens showed that each male was clasping an equal portion of the available female genitalia, and had I not always assumed such a feat impossible in insects, I would have been quite convinced that both males were actively mating with the same female at the same